REMARKS

The examiner's action dated August 12, 2008, has been received and its contents carefully noted.

In the Office action, the Examiner rejects Clams 1, 4, and 6-10 as unpatentable over Maggio (US EP 1339198) in view of Taniguchi (US 6,122,250) and further in view of Kimoto (US 6,920,603).

It should be noted that though the Examiner replaces the previously cited Manganini reference (US 2003/0026203) with the newly cited Maggio reference, this newly cited reference does not bring any additional prior art features that could make the combination of Maggio and Taniguchi/Kimoto obvious, regardless of how the teachings of those references may be properly combined.

Therefore the main points of the arguments presented in the amendment of May 10, 2008 establish the patentability of the present claims and to avoid needless repetition, those arguments are incorporated herein by reference.

Maggio (EP 1339198) describes a technique for handling Ethernet frame signals in an SDH/SONET network. As formulated in the abstract of this reference, Maggio defines a new layer/network over the DSH/SONET network in order to manage the Ethernet signals over the SDH/SONET network. (The so-called layer/network is defined by defining at least two Ethernet access points/Interfaces between Ethernet and SDH/SONET and Circuits connecting each pair of the Interfaces.) In the technical terms accepted in the field of communications, Maggio solves a task of mapping.

In paragraph [0051], Maggio acknowledges that SDH/SONET networks in principle provide different types of protection such as MS-SPRING. (Please note that applicants also acknowledge such methods in the background description of the present specification). However, this has no relation to Maggio's solution.

Maggio does not build his method on the referred to MS-SPRING method of protection, *i.e.*, he does not improve or otherwise modify that method. Rather, Maggio suggests a totally different method which, actually, is just a simple 1+1 protection principle. Maggio calls the principle "hitless" due to its duplication nature. According to the 1+1 principle, two network nodes (points) are connected via two co-existing paths; if one of the two co-existing point to point paths fails, the second of them will definitely deliver the traffic. Though Maggio mentions that his method is applicable to ring networks (see page 8, first line), he does not discuss whether or how his method cooperates with MS-SPRING or BLSR. Also, Maggio does not discuss any cases of forming an isolated section in the ring. In other words, Maggio cannot and does not recognize any problems occurring to Ethernet traffic when an isolated node(section) occurs in a ring network; for him if a ring network comprises a main ring and a protection ring, his method will be applicable.

It is understood that if Maggio does not recognize such a problem of ring networks, he cannot (and does not) provide or suggest any solution to such a problem.

Please note that the limitation "at least one isolated node in the network" is present in claim 1 of the present application to indicate the specific problem solved

for Ethernet traffic over SDH/SONET; this feature is absent from Maggio.

Neither of the additional cited references **(Taniguchi, Kimoto)** recognizes the above-mentioned problem occurring when transmitting Ethernet traffic via SDH/SONET ring networks.

The Taniguchi reference (US 6,122,250) explains what is a so-called squelch processing (see the third paragraph in the Field of the Invention section of this reference), and teaches about performing the squelch processing in ring networks at a high speed (see the end of the Taniguchi's abstract). To achieve this high speed squelching, Taniguchi provides different nodes with different squelch tables and squelch decision units.

Applicants wish to emphasize that:

- Taniguchi' concern is only about the speed of squelching;
- Taniguchi does not say a word about transmitting Ethernet traffic in ring networks;
- Owing to the two reasons above, Taniguchi cannot and does not recognize the problem solved by the present invention, *i.e.*, the problem of damaging Ethernet traffic in ring networks when a BLSR/MS-SPRING protection system is utilized and an isolated node (section) occurs in the network.

Therefore, Taniguchi (though dealing with squelch decisions) does not and cannot provide any motivation to solve the problem of the Applicants' invention, since Taniguchi's squelch decisions are intended for a totally different purpose not related to Ethernet traffic.

Therefore, Applicants disagree with the Examiner that the motivation for a combination of Maggio and Taniguchi solutions would be "to prevent squelching to use up the SDH/SONET resources" (see page 3, first full paragraph of the examiner's Action). Why should anybody have such a motivation before the problem for Ethernet traffic was at all recognized?

The Kimoto reference (US 6,920,603), although formally belonging to the communications field, relates to yet another, unrelated, problem of communication - path error monitoring. For monitoring errors in transmission via communication paths, there exists a specific procedure called Bit Interleaving Parity (BIP). In paragraph 2 of the section "Best mode for Carrying Out the Invention", Kimoto describes how BIP is performed based on information transmitted in various bytes of a digital traffic frame, as follows:

> ...sender side in a communication path has an operation circuit for performing a BIP operation for the same (or different) operation range as a conventional BIP operation in which the B3 byte is used and an insertion circuit for inserting a BIP operation result into an unused byte other than the B3 byte in POHs, such as the J1 byte. A receiver side in the middle of the communication path has a circuit for comparing the BIP operation result with the unused byte such as the J1 byte.

The fact that some bytes in a SONET/SDH frame can be unused is widely known and even stated in relevant Standard Recommendations. Kimoto suggests using an unused J byte (such as J1) for inserting into it contents for calculating BIP (see Fig. 14).

Kimoto does not mention Ethernet traffic as having any specific relevance/effect to the BIP procedure. Kimoto cannot and does not recognize any problem which Ethernet traffic may have when being transmitted via an SDH/SONET ring network in case an isolated node occurs.

Like Maggio and Taniguchi, Kimoto neither describes nor suggests that a non-used byte J1 may help in protecting Ethernet traffic when being transmitted via SDH/SONET ring networks.

Therefore, as stated in the previous response to the first Examiner's action, it should be emphasized that:

> Neither Maggio, nor Taniguchi, nor Kimoto recognizes the problem of losing Ethernet traffic when an isolated node appears in a ring network, and therefore none of them tries to solve it. Even in general, no one of the above references, nor any combination thereof, mentions or discusses any problem for any specific type of traffic when the MS-SPRING/BLSR protection is utilized in a ring network.

Recognition of the problem is one "missing link" in the logical chain built by the Examiner. Without this missing link, there is no logical combination of the cited references that could motivate a skilled person to arrive to the claimed invention.

For the first time, the problem was recognized and formulated by the Inventors, namely: appearance of an "isolated node" triggers a conventional squelching algorithm eliminating traffic which originates or terminates at the

isolated node; the squelching causes loss of all Ethernet traffic enveloped by SDH/SONET containers, since the Ethernet traffic must perform termination/generation operations at every node of a ring network (see page 5, line 10 to page 6, line 10 of the original specification).

Another "missing link" in the above-mentioned logical chain is set-up of a task. The Inventors have set up (and have solved) the task to overcome the described problem at the SDH/SONET level, without utilizing additional, complex, heavy and expensive means on a higher level, such as the STP protocol.

Without recognizing the problem and setting up the task, a skilled person could not propose *a)* the very idea of protecting Ethernet traffic from elimination at the very SDH/SONET level in a ring network, and *b)* the solution to initiate suppression of the conventional squelching mechanism at least with respect to SDH/SONET containers carrying Ethernet traffic, and at least upon detecting appearance of the "isolated node" in the ring network.

These features of the invention are clearly defined in independent claims 1 and 8.

Applicants would like to emphasize that they were the first to propose a solution to the newly recognized problem at the 1st, SDH/SONET, level (and not at a 2nd level Ethernet, requiring more complex and expensive tools).

It is therefore requested that, in view of the comments presented above, the Examiner reconsider his previous position and acknowledge that the invention claimed in Claims 1 and 8 satisfies the critera of non-obviousness.

The dependent claims should be considered patentable at least due to being dependent from the patentable main claims.

In view of the foregoing it is requested that the prior rejections be reconsidered and withdrawn, that claims 1-10 be allowed and that the application be found in allowable condition.

Respectfully submitted,

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